

WAR-TIME PROBLEMS IN INDUSTRIAL HEALTH*

CARL M. PETERSON, M. D.
Chicago, Illinois

THE tempo and importance of industrial health are increasing by leaps and bounds. Certainly, no one factor about modern warfare has so impressed everyone of us as its dependence on industrial production. There is great and justifiable concern about our resources in materials, machines and man power. As a matter of fact, our greatest shortage of all is TIME. It is now regarded as axiomatic that no modern military power can afford to lose the productive energy of skilled and capable craftsmen from exposures unfavorable to health which in the main are preventable. In the course of current events, it is becoming plainer daily that the unprecedented mobilization of everything we possess must include intensification of industrial health effort.

The war-time problems of medicine in industry are not so much the acquisition of new information as wider and more direct application of what we already know. Industrial hygienists believe that the medical and engineering profession have accumulated sufficient data and have in their possession technical procedure and equipment to control all but the very newest occupational exposures or the very latest modifications of old ones. To be sure, research is a highly essential factor in the prosecution of war-time industrial health to such an extent that a considerable share of the total activities of such agencies as the Division of Industrial Hygiene of the National Institute of Health and many committees set up in the National Research Council is directly applicable to the physical welfare of workers. The Subcommittee on Industrial Health and Medicine has listed certain problems as of particular significance, as for example, the intensified occupational dermatoses problems associated with the increased use of cutting oils, compounds and chemicals; the appearance of new abrasives in grinding operations; the reversion to sand in many blasting operations; the enormous expansion in the use of acids and pickling operations and solvents of almost uncounted numbers and uses; the employment of x-rays in line operations; modifications in paint spraying methods and many other types of exposures which can be exceedingly troublesome if proper control measures are not utilized. All of us are familiar with the risks of munitions manufacture and production of war gases. Certainly, one of the most perplexing problems facing industry at the moment is the shifting nature of the work force resulting from the dislocation of young males to the military establishments requiring replacement by women, older men, sub-standard

workers of various types including handicapped individuals or others not eligible for military service, practically all of whom require selective placement in occupations suitable to their physical and temperamental makeups.

PRINCIPAL INDUSTRIAL PROBLEMS

But in the main, the principal industrial problems which confront the medical profession aside from those which have to do with improved standards of medical and surgical care, are those involved in the wider application of preventive medicine and surgery in industry and much more extensive and improved industrial health supervision by physicians in plants of all kinds and sizes. The directions in which we are likely to find a solution to these complex situations, may possibly be best illustrated as follows:

ANALYZING CAUSES OF ABSENTEEISM

About a year and a half ago the director of the bureau of industrial hygiene in one of our state health departments asked the personnel manager of a good-sized machine tool company to maintain sickness records as a means of analyzing the causes of employee absenteeism. The plant was most coöperative and after careful study the conclusion was reached that considerable sums in lost wages and in shop production could be saved if more adequate industrial health supervision could be provided for the plant personnel. In the course of events a full-time industrial physician and three full-time industrial nurses were employed to supply this type of service to approximately 2,500 workers.

This procedure aroused interest elsewhere in the same industrial community and other smaller plants were impressed with the contribution which medical service could make in lowering lost time absences arising out of causes related to health. Since these plants felt unable individually to support a full-time physician, the local medical profession was consulted. It was suggested that individual practicing physicians might meet these new medical requirements if a basis agreeable to the employer and to the doctors could be arranged. After full discussion a rotating scheme for personal visitation by physicians to the plants was hit upon, such visits to occur daily, to last at least an hour, and to occur at a definite time of day, usually in the morning. It is interesting to report that frequently these physicians have become interested enough so that they spend more time than is actually required. The manner of rotation and all other medical policies, including compensation, are made by the local profession and recommendations sent directly to the personnel managers. All physicians in the community can participate if they care to, and nearly all of them do.

IMPORTANT CONSIDERATIONS

This experience compresses into one compact

* Read before the Second General Meeting at the Seventieth Annual Session of the California Medical Association, Del Monte, May 3-6, 1942.

From the Council on Industrial Health of the American Medical Association.

case history a number of very important considerations—

1. It exemplifies the growing recognition by industrialists of the value of industrial health service. We have something they can use provided a method is devised which the employer can comfortably support.

2. It supplies an answer, at least in part, to the vexing question of how industrial health can be brought to the small plant.

3. It dramatizes the immensely improved relationships which are rapidly coming to exist everywhere between the three major classifications of physicians on whom industrial medical activity largely rests:

a. The industrial hygienist, commonly associated with bureaus of industrial hygiene in state health departments, whose functions are mainly investigative or consultative directly to industry and to the medical profession as well as certain duties in relation to enforcement of public health and sanitary codes relating to conditions of work. Prevention of industrial disability, whatever form it takes, occupies a prominent place in his thinking.

b. The full-time physician serving in one or several plants who exemplifies specialty practice in this field. He is concerned very materially with prevention in all of its aspects but in addition he must treat compensable disability and occupy himself with the many details of medical department administration.

c. The private practitioner in general or special practice who serves on call or part time. Best current estimates indicate that 80 to 85 per cent of medical service to industry is supplied in this fashion. As such it has been mainly remedial in character to such an extent that medium-sized and smaller plants have been left without the considerable advantages of preventive industrial medicine and surgery.

OBJECTIVES AND PROGRAM

The ability of the private practitioner to extend his interests in the industrial field and to face new problems and altered relationships has engaged the complete attention of the Council on Industrial Health for many months, both singly and in combination with the Subcommittee on Industrial Health and Medicine of the Health and Medical Committee, Federal Security Agency. From the very outset the Council became convinced that its educational and other services could only be made effective through wholehearted coöperation with each state medical society. We have been in close touch with developments in the California Medical Association through its own Committee on Industrial Practice under the chairmanship of Dr. Donald Cass of Los Angeles. I am thoroughly convinced that as the full implications unfold, no committee in your state association structure will be called upon to provide a higher type of leadership or will contribute more to

existing medical standards or to the advancement of sound professional relationships. It now becomes desirable and even imperative to extend this same type of coöperative organization into counties to enable our membership to respond to the medical needs of industry occurring in their own individual communities.

What kind of program do we have in mind? In the first place, we must agree upon objectives. The purpose of medicine in industry is to promote the health and physical well-being of industrial employees. These objectives should be accomplished by:

1. Prevention of disease or injury in industry by establishing proper medical supervision over industrial materials, processes, environment and workers.

2. Health conservation of workers through physical supervision and education.

3. Medical and surgical care to restore health and earning capacity as promptly as possible following industrial accident or disease.

Certainly no new principle is enunciated in this list of objectives but it does provide a foundation on which a superstructure of specific functions in industrial medicine can rest and can be so regarded with confidence by all elements in the medical profession.

In the second place, we must define a little more in detail the medical needs of industry in terms of personnel and specific functions which will bring to plants both large and small good medical supervision, satisfactory both to those who receive as well as those who supply these services. The following components are essential:

For every plant:

1. A physician.
2. Nursing service.
3. Industrial hygiene service.
4. Proper correlation of plant health activities with:
 - a. The practicing profession.
 - b. The industrial commission.
 - c. Units of local, county and state health health departments.
5. A health program to include:
 - a. Health conservation by physical supervision and education.
 - b. Plant inspections to establish control over harmful exposures.
 - c. First aid and emergency care.
 - d. Proper reporting of all lost time disability.
6. Adequate compensation of industrial health personnel.

As this ideal goal is reached (and enormous impetus is accumulating under the pressure of war industry and in the expressions of influential people in the government, in industry, and in labor) we can begin to feel that the quality of industrial health supervision is approaching reasonable uniformity—the quantity only varying according to size of the plant.

DESCRIPTIVE PAMPHLETS ON MEDICAL SERVICE IN INDUSTRY

To hasten this end, the Council on Industrial Health has issued a series of pamphlets descriptive of Medical Service in Industry which includes such titles as—

1. *Outline of Procedure for Physicians in Industry.*

This is designed to acquaint the practicing physician with duties and relationships in industry—a most helpful and useful statement.

2. *The Industrial Medical Department.*

A brief description of how to go about setting up a plant dispensary.

3. *Plant Hygiene Studies.*

This emphasizes that no physician will make a real contribution unless he gets out in the plant and makes constructive suggestions about the prevention of harmful exposures, using necessary industrial hygiene consultation and study whenever necessary.

All these publications and others on various aspects of industrial health are available on request from the Council office in Chicago or through your own state committee organization.

PROCUREMENT

Now that we have defined specific needs and objectives in industrial health, we come to the most serious problem of all—the procurement of professional and technical personnel sufficient in number and in competence to supply these services about which we have been talking. There are three main aspects:

1. Shall existing industrial-medical services be maintained as essential to the war effort?
2. From what sources may we expect to draw additions and replacements to our present industrial medical organizations?
3. What provision is necessary to arrange for the training of new recruits?

Plans are on foot to clarify the status of the industrial physician. He has always ranked high in the essential civilian medical services along with members of hospital staffs and faculties of medical schools. Instructions are being prepared by the Procurement and Assignment Service with the help of its Adversory Committee on Industrial Health and Medicine, so that state procurement and assignment committees will be able to refer to explicit instructions about maintenance of industrial physicians at existing assignments. Evidently also these same state procurement and assignment committees will function more and more as placement centers for new untrained medical personnel needed in war industry.

TRAINING

The most difficult problem to solve has been the matter of providing the proper training. A few professional schools have developed advanced training courses and there has been some effort

to provide continuation study under existing postgraduate programs in state medical societies. The greatest success has been encountered where there has been concomitant training of physicians and industrialists together in the benefits to be derived from industrial health activity. The "Outline of Procedure for Physicians in Industry" will act as an immediately available guide to all ordinary duties and relationships. For more extended training both before and after graduation, the Council on Industrial Health and the Committee on Education of the American Association of Industrial Physicians and Surgeons have prepared a report entitled "The Teaching of Industrial Health," which we will be glad to supply either directly or through application to your own state society committee.

CONCLUSION

In the last analysis, a considerable share of the problems in industrial health boil down to these three:

1. Is this environment a safe and healthful place in which to work?
2. Is this worker properly equipped physically and temperamentally for the work he is doing or for which he is applying, and if not how can he be fitted to perform it?
3. Is this physician properly equipped to recognize and control forms of disability most likely to occur in plants or in occupational groups under his supervision?

In each of these fields attempts are being made to apply the techniques of standardization and certification. Plants are already being inspected for hazards to health and safety. Industrial medical departments are being approved as fulfilling certain minimum standards. In keeping with the times, it is proposed that physicians limiting practice to industrial medical affairs demonstrate their qualifications as specialists before a certifying board.

These prospects, whatever else may be said about them, indicate that industrial health is a province in medicine of great vitality and with most interesting potentialities. Many of its important aspects which only physicians are equipped to perform are virtually unexplored. Here, perhaps, is one of the few remaining opportunities for the extension of needed medical service on the basis of personal initiative by individual physicians. Again, developments which have already occurred may be the spearhead leading to nationalization of certain forms of medical service. In any event, the highest type of medical leadership and diplomacy is needed to see that the essential interests of the worker, the employer and the physician are properly understood and intelligently safeguarded.

535 North Dearborn Street.

Give me health and a day, and I will make the pomp of emperors ridiculous. Emerson, *Nature, Addresses, and Lectures: Beauty*.